# **Surfing the Waves**of Digital Currency

A Revenue Agency Point of View

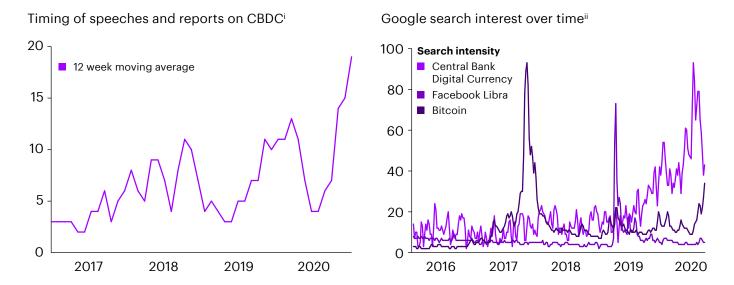


What is money, how do we transfer value and how can we improve the current financial system? The Payments industry is rapidly evolving and digital currency is a key part of this shift.



This shift has now reached the sovereign central banks (see Figure 1), resulting in a race to create a new form of money: central bank digital currency (CBDC). It's not a matter of if, but when, CBDC will go into production and provide a new payment rail for commerce, so now is the time for revenue agencies to prepare.

Figure 1 - CBDCs: the next hype or the future of payments?



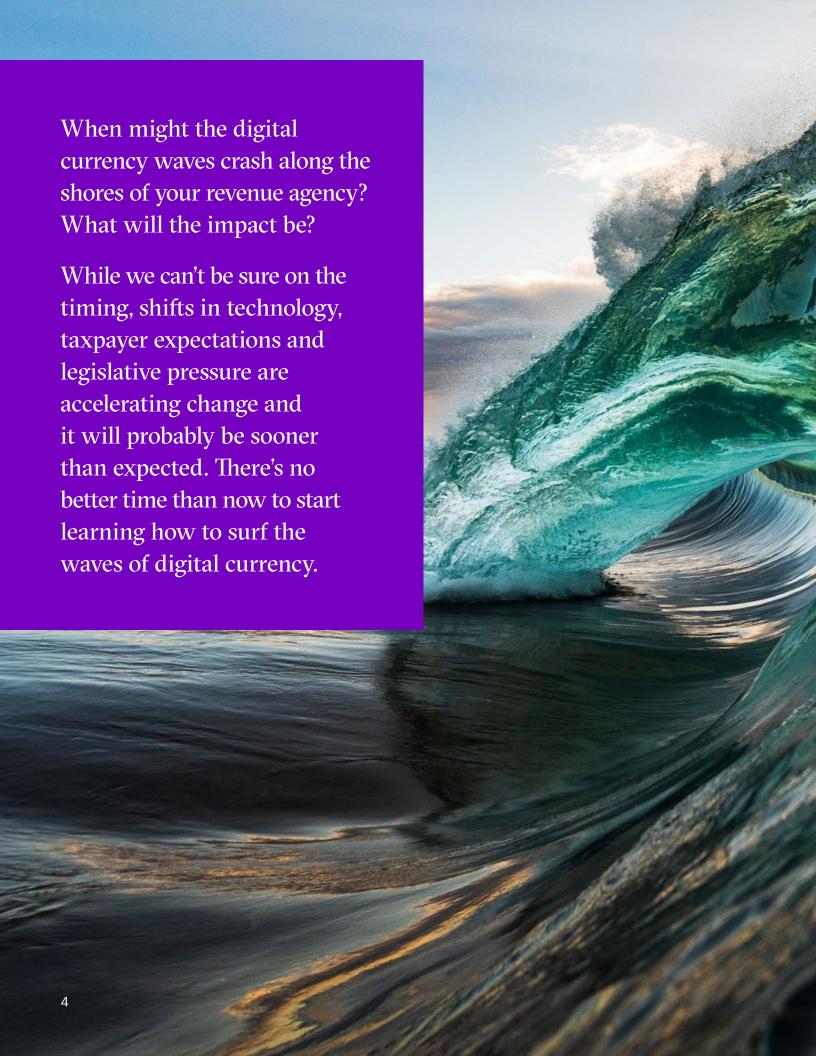
i 3-month moving average of the count of central bankers' speeches and reports resulting from a case-insensitive search for the phrase: digital currency. Sources: BIS. Data accessed on 8 Jan 2021.

## What digital currency could look like

It's early April and Gabby, who lives and works in the U.S. as a freelance software developer, just submitted her annual tax return and is anxiously awaiting her tax refund. Gabby has opted-in to the first joint IRS-U.S. Federal Reserve digital dollar pilot program, which gave the option of being paid in digital dollars. As part of the pilot, her tax withholding payments have been programed into her digital wallet for easy compliance and record keeping.

Gabby's employer pays her in the new digital dollar format, which goes directly into her digital wallet, managed on her smartphone. Two days after submitting her tax forms, Gabby gets a notification on her phone informing her that a \$1,400 refund is ready for deposit. Gabby selects direct digital wallet deposit and within a few minutes she has \$1,400 digital dollars ready to spend—with no intermediary bank involved. Gabby thinks "well that was easy" and goes on with the rest of her day.

ii 2-week moving average of worldwide search interest. The search was run on search terms "Bitcoin" and "Facebook Libra" and topic "Central Bank Digital Currency". Sources: Google Trends; authors' calculations. Data accessed on 8 Jan 2021.

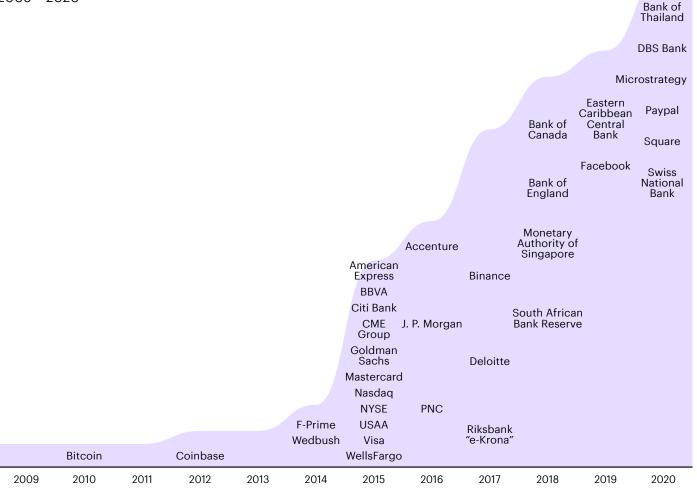


### Why care now?

## The normalization of digital wallets and digital currency is rapidly occurring.

We're seeing this transformation across the financial industry and expect the trend to accelerate due to changing consumer habits from COVID-19 and large financial entities joining the race to build the money and payment systems of the future.<sup>2</sup> In this paper we focus on the possible ramifications of digital currencies—predominantly CBDCs—for revenue agencies.

Financial Services Firms entering Digital Currency 2009 – 2020



**Date of Deal** 

# CBDC initiatives are quickly transitioning from technology-driven concepts to real-world pilots.

According to the Bank for International Settlements, 80 percent of central banks are engaging with CBDC work in some way with 50 percent already in the experimental or pilot phase.<sup>3</sup> Notable central banks publicly pursuing CBDC include:

Figure 2 - Selected Retail CBDC Projects4,5

Central Bank	Stage	
U.S. Federal Reserve	Research – Accenture has partnered with the Digital Dollar Foundation to advance exploration of a United States CBDC	
European Central Bank (ECB)	Ongoing work – Accenture has worked with the ECB and the 18 national central banks of the Eurosystem on project EuroChain	
People's Bank of China (PBoC)	Reported Pilots	
Central Bank of Sweden (Riksbank)	Ongoing work – Accenture was chosen to lead the e-krona digital currency pilot	
Central Bank of the Bahamas	Available nationwide	



CBDCs are designed to be a new form of legal tender, with revenue agencies likely being required to accept them as payment for taxes and debts. We believe that there are proactive steps that your agency can start taking to prepare for this change.

# Revenue agencies need to learn, engage, and assess CBDCs

# While it's not known precisely when a CBDC will be production-ready, you need to prepare for change now.

First, consider establishing an internal expert group to understand digital currency and its current state within your jurisdictions. Next, seek to be involved in some capacity—informed and/ or consulted—with the core decision makers designing the future CBDC for your jurisdiction. As future stakeholders of the CBDC, your agency needs to assess the opportunities and impacts of CBDCs on internal processes and your taxpayers. In common with the increasing pace of change across all aspects of technology, adapting an agile mindset as digital currency waves continue to break is critical for resilience and responsiveness in the rapidly moving field.

Education around digital currency, more broadly known as digital assets, is the first key hurdle. Digital assets are a wide-ranging industry, including cryptoassets, private stablecoins, tokenized securities, consortium currencies, and sovereign central bank digital currencies. These assets are defined by their design and respective characteristics, such as decentralization, underlying technology, and legal rights. Revenue agencies need to remain vigilant as general adoption and regulations around digital assets continue to mature globally.

The involvement of revenue agencies during the design and decision-making phases of CBDCs is essential for any agency to prepare to be accountable for the tax administration of this new form of currency. Many questions that you may have—when will a CBDC be put into production, will the CBDC be distributed directly from the central bank to consumers or through a commercial bank network, what will the infrastructure be and how to process payments—are uncertain until a design is finalized by the CBDC decision makers. To gain insights, involvement as a key stakeholder in CBDC design decisions is critical for every revenue agency.

The involvement of revenue agencies during the design and decision-making phases of CBDCs is essential for any agency to prepare to be accountable for the tax administration of this new form of currency.

While design choices are still under debate, it is to be expected that CBDC infrastructure will live alongside the current payment platforms in use today. This means that revenue agencies will likely be required to support both legacy and new digital currency systems for the foreseeable future. The new CBDC payment systems will open opportunities such as faster payments, new economic insights, real-time taxation, and programmable money.

The new CBDC payment systems will open opportunities such as faster payments, new economic insights, real-time taxation, and programmable money.

An example of a possible model for a CBDC is being championed by the Digital Dollar Project. This model proposes the following design characteristics for a United States CBDC:

Figure 3 - Tenets of a Digital Dollar<sup>6</sup>

Characteristic	Explanation	
Tokenization	A digital dollar will be a tokenized form of the US dollar	
Third format of currency	A digital dollar will operate alongside existing fiat currency and commercial bank money. It will mirror many properties of physical money, including its ability to work alongside existing account-based systems	
Maintenance of the two-tiered banking system	A digital dollar will be distributed through the existing two-tiered architecture of commercial banks and regulated intermediaries	
Privacy	The digital dollar will support a balance between individual privacy rights and necessary compliance and regulatory processes, decided upon by policymakers and ultimately reflecting the jurisprudence around the Fourth Amendment	
Monetary policy neutral	A digital dollar will not impact the Federal Reserve's ability to affect monetary policy and control inflation. A digital dollar could act as a new policy tool	
Technology decisions and design choices driven by functional needs	The policy and economic requirements of a digital dollar will inform both the underlying technology and ultimate design choices	
Future proofing the architecture through flexibility	The chosen technological architecture will offer the flexibility to adapt configurability based on policy and economic considerations	
Continued private sector innovation	A digital dollar will act as a catalyst for innovation and will not be antithetical to the development of private sector initiatives	

# What questions should revenue agencies be asking?

Recognizing CBDC
emergence and how it will
impact how the world does
business, revenue agencies
across the globe now need
to plan for the following
areas of impact, including,
but not limited to:



#### **Ecosystem Partnerships**

Understanding digital currency and its implications for revenue agencies is complicated and constantly evolving. How can you leverage public and private ecosystem partners to stay ahead of the curve?



### Taxpayer Education and Outreach

As digital currency begins to embed itself in the day-to-day lives of taxpayers, how might you educate taxpayers in a straightforward way to empower voluntary compliance and reduce taxpayer error?



### **Business Processes** and Technology

Digital currency may disrupt fundamental components of your agency's underlying business processes and technological infrastructure. For example, programmable digital currency could automate tax refund payments direct to end taxpayers or introduce new cybersecurity risks. How might you begin to understand and prepare for the specific impacts to your agency's processes and technology?



#### **Workforce of the Future**

As the waves of digital currency continue to grow, it will be critical for revenue agencies to have a specialized workforce in place. How do you begin to identify your specific workforce needs?



#### **Tax Administration**

Digital currency will accelerate the decline of paper cash and bank notes. In what ways will a largely cashless society affect how your agency fulfills tax administration?

### The CBDC aftershock

With the inevitable launch of CBDCs, it's possible that other digital currencies will be adopted by the public. If these gather significant adoption or fill gaps where CBDC cannot take hold, you may need to provide for privately issued digital currencies.

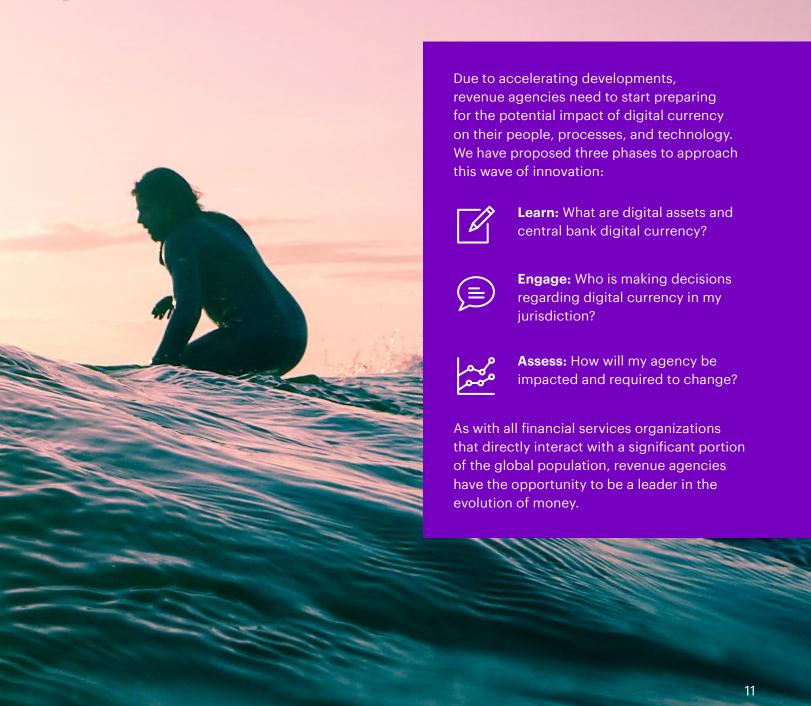
For example, stablecoins and consortium currencies, which enable transactions and minimize volatility, could be employed to facilitate digital commerce.

Special consideration may be needed for Libra, best known as a Facebook-led initiative to launch a global currency and supporting payments infrastructure, governed by an association of corporations, backed by a basket of sovereign currencies. In theory, Libra could have potentially launched with a user base exceeding 2.6 billion users. Libra served as a warning shot to central banks, reflected by multiple central banks subsequently announcing the exploration or accelerating development of a CBDC since Libra's initial announcement in 2019.

Figure 4 - Digital Asset Payment Systems

	Consortium Currency (Libra)	Central Bank Digital Currency	Private Stablecoin
Definition	Tokens which are issued by a consortium of social technology or financial companies maintaining the payment network	Tokenized central bank money which holds the same rights and liabilities as central bank notes	Privately issued tokens which reduce volatility by retaining a peg to a "stable asset," usually a fiat currency like the Dollar or Euro
Stage of Development	Research	Various	Production
Level of Decentralization	Medium  Consortium members participate in governance, implementation and strategy	Low CBDC are only issued by the central bank	High  Multiple private stablecoin issuers exist
Geographic Reach	Unknown  Dependent on consortium design and policy	Unknown  Dependent on central bank design and policy	Wide Tokens are available to transfer 24/7 on permissionless networks

Money is rapidly transforming from a physical to a digitally native product. With most central banks pursuing this new form of sovereign currency, societies will soon have a new payment platform to facilitate commerce.



#### **Contacts**



**David Regan**Global Revenue Lead
Accenture



Alejandro Lira Volpi Global Revenue Accenture Federal Services



Adam Siegel

Management Consulting

Accenture Federal Services



**Liam Glennon**Digital Assets Lead
Accenture Federal Services

#### References

- BIS Working Papers, No 880 "Rise of the central bank digital currencies: drivers, approaches and technologies" Raphael Auer, Giulio Cornelli and Jon Frost.
- BIS Bulletin, No 3 "Covid-19, cash and the future of payments" Raphael Auer, Giulio Cornelli and Jon Frost.
- BIS Papers, No 107 "Impending arrival a sequel to the survey on central bank digital currency" Codruta Boar, Henry Holden and Amber Wadsworth.
- 4 https://www.bis.org/publ/qtrpdf/r\_qt2003j.htm
- https://www.nasdaq.com/articles/central-bankof-bahamas-launches-landmark-sand-dollardigital-currency-2020-10-21
- Exploring a US CBDC. The Digital Dollar Project, May 2020
- https://www.statista.com/statistics/264810/ number-of-monthly-active-facebook-usersworldwide